

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellants: Vives, et al.	<u>CERTIFICATE OF FACSIMILE TRANSMISSION</u> I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Alexandria, Virginia on the date below.
Title: DOUBLE SIDE PRINTED RECEIPT	<i>Todd A. Rathe</i> (Printed Name)
Appl. No.: 10/686,909	(Signature)
Filing Date: 10/15/2003	(Date of Deposit)
Examiner: Marini, Matthew G.	
Art Unit: 2854	

BRIEF ON APPEAL

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.

2. Related Appeals and Interferences

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to Appellants or Appellants' patent representative.

3. Status of Claims

Claims 1-42 were originally pending in the application. Concurrent with the filing of the present application, a preliminary amendment was filed canceling claims 1-42 and adding claims 43-54. In response to a first substantive office action mailed on May 11, 2003, claims 52 and 54 were canceled; claims 43 and 52 were amended and claim 55-62 were added. In the final office action mailed on October 20 6, 2007, claims 59-62 were withdrawn from consideration. This is an appeal from the final office action mailed on October 26, 2007 in which claims 43-52 and claims 55 -58 were rejected. 59-62 stand withdrawn from consideration. The present appeal is directed to Claims 43-52 and claims 55 -58.

4. A Status of Amendments

An amendment after final was filed on December 26, 2007 requesting that previously withdrawn claims 59-62 be canceled to place the application in better form for appeal. The Advisory Action dated January 25, 2008 denied entry of the requested cancellation of withdrawn claims 59-62. The remaining pending claims 43-52 and 55-58 stand rejected.

5. Summary of Claimed Subject Matter

A. Claim 43

Claim 43 is directed to system for simultaneously printing on two or more media surfaces the system comprises:

at least one printing unit (404, Figures 4 and five) disposed on a closed printhead path (402, Figure 4) (page 11, lines 26-page 12, line 6); and

a print medium feed unit (302, Figure 3) adapted to feed at least one print medium through said closed printhead path, said at least one print medium including two or more print surfaces (page 11, lines 9-13); and

means for electrically communicating with a print controller (220, Figure 2) as said printing unit travels along said closed printhead path, said means for electrically communicating includes conductive brushes (502, Figure 5) extending from said printing unit, said brushes being adapted to communicate with a conductive bus positioned around said closed printhead path (page 12, lines 23-26);

wherein said printing unit is adapted to travel along said closed printhead path to print on at least two print surfaces (page 10, lines 8-10; page 11, lines 9-11).

B. Claim 52

Claim 52 depends from claim 50 which depends from claim 49 which in turn depends from claim 43. Claim 49 additionally recites a drive system (408, 412) adapted to carry said printing unit along said closed printhead path (page 12, lines 6-14).

Claim 50 depends from claim 49 and additionally recites that drive system includes a drive belt (412, Figure 4) and a pair of opposing pulleys (408, 410, Figure 4), said printing unit being engaged to said drive belt (page 12, lines 6-14).. Claim 52 depends from claim 50 and recites that each of said pair of opposing pulleys are adapted to allow said printing unit to pass around one of said pulleys to travel along said closed printhead path (page 12, lines 13-15).

C. Claim 55

Claim 55 depends from claim 43 and recites that the printing unit includes resistors configured to eject ink from associated nozzles and that the brushes are configured to electrically connect resistors to drive circuitry for the printing unit. (Page 12, lines 23-26).

D. Claim 56

Claim 56 depends from claim 55 and recites that the brushes are configured to provide power to selected resistors for firing the selected resistors. (Page 12, lines 23-26).

6. Grounds of Rejection to be Reviewed on Appeal

The issues on appeal are **(1)** whether the Examiner erred in rejecting Claims 43-51 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov); **(2)** whether the Examiner erred in rejecting claim 52 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of Japanese Patent 04310770 (Inoue); and **(3)** whether Examiner erred in rejecting claims 55-57 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of US Patent 6,623,105 (Shen).

7. Argument

I. Legal Standards

Law of Obviousness

Claims 43-52 and 55-58 are rejected under 35 U.S.C. § 103(a), which states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The legal standards under 35 U.S.C. § 103(a) are well-settled. Obviousness under 35 U.S.C. § 103(a) involves four factual inquiries: 1) the scope and content of the prior art; 2) the differences between the claims and the prior art; 3) the level of ordinary skill in the pertinent art; and 4) secondary considerations, if any, of

nonobviousness. See KSR Intl v. Teleflex Inc., 550 US _____, (2007); Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 U.S.P.Q. 785, 787-88 (Fed. Cir. 1984). “[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” In re Fritch, 972 F.2d 1260, 1265, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992).

As noted by the Federal Circuit, the “factual inquiry whether to combine references must be thorough and searching.” McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 60 U.S.P.Q. 2d 1001 (Fed. Cir. 2001). Further, it “must be based on objective evidence of record.” In re Lee, 277 F.3d 1338, 61 U.S.P.Q. 2d 1430 (Fed. Cir. 2002). The teaching or suggestion to make the claimed combination must be found in the prior art, and not in the applicant’s disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991). The test for determining the obviousness of combining known elements is not rigid, but depends on such factors as the interrelated teaching of multiple patents, the effects of demands known to the design community or present in the marketplace and the background knowledge possessed by a person of ordinary skill in the art. KSR Intl v. Teleflex Inc., 550 US _____, (2007). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990). “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” Lee (citing W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983)). Teaching away from the claimed invention is a strong indication of non-obviousness and an improper combination of references. U.S. v. Adams, 383 U.S. 39 (1966).

III. The Examiner's Rejection of Claims 43-52 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) Should be Reversed Because It Would Not Be Obvious to Modify Wright based upon Burikov so As to Include Every Limitation of Each of the Claims.

Claim 43 recites at least one printing unit disposed on a closed print head path and means for electrically communicating with a print controller as the printing unit travels along the closed print head path. The means includes conductive brushes extending from a print unit, wherein the brushes are adapted to communicate with a conductive bus positioned around the closed print head path.

As acknowledged on pages 3 and 4 of the Final Office Action, Wright fails to disclose conductive brushes adapted to communicate with a conductive bus positioned around a closed print head path. As a result, the Examiner attempts to additionally rely upon Burikov US Patent 6,341,839 by asserting:

Burikov et al. teaches in Fig. 2, a device similar in structure to Wright et al., where conductive brushes, 15, extend from a printhead, 2, said the brushes, 15, being adapted to communicate with a conductive bus, 9, via brushes, 14, positioned around said closed print head path, Col. 4 lines 6-12; said brushes, 15, extend from the printing unit, 2, and communicate with the controller, 20, in the sense that electricity is conducted from bus, 9, to the printing unit, 2, in order for the print unit, 2, to operate; hence electrically communicating.

(Final Office Action dated 10/26/2007).

However, in rejecting claim 43, the Examiner fails to satisfactorily address each of the limitations of claim 54. Claim 54 not only recites a conductive brushes and a conductive bus, but also recites that the conductive brushes are used to communicate with a print controller.

Neither Wright nor Burikov, alone or in combination, disclose or suggest conductive brushes that communicate with a print controller. In contrast, the conductive brushes of Burikov are merely used to supply power to the carriage

(Column 4, lines 24-26). Conductive brushes 15 of Burikov do not communicate with a print controller. In fact, Burikov specifically discloses an electronic controller 21 "for communication over a radio channel with a control unit." (Column 4, lines 19-20). One of ordinary skill in the art recognizes that using conductive brushes to power a carriage is not the same as using conductive brushes to "communicate with a print controller".

In response to such previously raised points, the Examiner further argues:

Insofar as the recited structure of the brushes, controller, and bus, Burikova et al. teaches all three. The brushes, 15, make contact with a bus like object, 9, which electrically communicates with the printing unit, 2, in the sense that the bus supplies electricity sent from a controller unit, 20, to the printing unit, via the conductive brushes, 15, so as to print on a roll of paper. Said another way, the controller, 20, electrically communicate with the printing unit via the direct connection between the brushes, 15, located on the printing unit, 2, and the bus, 9. This connection allows for the printing unit, 2, to be supplied with electricity and eject ink onto a substrate.

(Final Office Action, page 7) (Emphasis added).

However, this response is replete with inaccuracies and mischaracterizations. First and foremost, the transmission of power across brushes 15 does NOT result in printing on a roll of paper or the ejection of ink onto a substrate. As previously noted, brushes 15 merely supply power to drive the carriage. (Column 4, lines 25-26). Movement of the carriage does not result in printing onto a substrate or onto a roll of paper. To achieve printing, the firing chambers (the resistors) of the print unit must actually be fired.

Second, nowhere does Burikov disclose a print unit 2. In contrast, Burikov discloses rollers 2. As noted above, the brushes merely supply power to a carriage, not a print unit.

Third, in contrast to the assertion made by the Examiner, nowhere does Burikov disclose that controller 20 is even connected to, let alone communicates via, brushes 15. Burikov fails to disclose anything about control unit 20. The only

discussion of any controller is with regard to controller 21 which communicates over a radio channel with another control unit (not shown) in the process of developing images. (See column 4, lines 19-22). The Examiner incorrectly characterizes what is actually taught by Burikov. Thus, the rejection of claim 43 based upon Wright and Burikov should be reversed. The rejection of claims 44-51, which depend from claim, should be reversed for the same reasons.

IV. The Examiner's Rejection of Claim 52 under 35 U.S.C. § 103(a) under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of Japanese Patent 04310770 (Inoue) Should be Reversed Because It Would Not Be Obvious to Modify Wright based upon Burikov and Inoue so As to Include Every Limitation of Each of the Claims.

Claim 52 depends from claim 43. The rejection of claim 52 should be reversed for the same reasons discussed above with respect to claim 43. Inoue fails to satisfy the deficiencies of Wright and Burikov.

V. The Examiner's Rejection of Claim 55-57 under 35 U.S.C. § 103(a) under 35 U.S.C. § 103(a) as being as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of US Patent 6,623,105 (Shen) Should be Reversed Because It Would Not Be Obvious to Modify Wright based upon Burikov and Inoue so As to Include Every Limitation of Each of the Claims.

The rejection of claims 55-57, which depend from claim 43, should be reversed for the same reasons discussed above with respect to claim 43. Shen fails to satisfy the deficiencies Wright and Burikov. The rejection of claims 55 and 56 should be reversed for at least the following additional reasons.

Claim 55 depends from claim 43 and recites that the printing unit includes resistors configured to eject ink from associated nozzles and that the brushes are configured to electrically connect resistors to drive circuitry for the printing unit.

Claim 56 depends from claim 55 and recites that the brushes are configured to provide power to selected resistors for firing the selected resistors.

Neither Wright, Burikov nor Shen, alone or in combination, disclose electrically conductive brushes electrically connect resistors to drive circuitry or brushes that provide power to selected resistors for firing the selected resistors. The Examiner acknowledges that neither Wright nor Burikov disclose that the printing unit includes resistors configured to eject ink from associated nozzles and that the brushes are configured to electrically connect resistors to drive circuitry for the printing unit. As a result, the Examiner attempts to additionally rely upon Shen by asserting that:

Shen teaches in Col.3 lines 47-50, a typical inkjet print head, 40, similar to the printing units taught in both Wright et al. and Burikov et al., containing resistors and nozzles selectively powered to eject ink corresponding to characters for a point of sales device. It would have been obvious to one of ordinary skill in the art at the time the invention to include the resistors of Shen to the printing unit of Wright et al. because Shen teaches it is conventional in the art of ink jets to use such resistors to eject ink from the print head.

(Final Office Action dated October 20 6, 2007, page 6).

This argument raised by the Examiner completely misses the mark. Appellants have never argued that novelty existed because the system of claim 55 merely includes an inkjet print head having resistors. In contrast, Appellants have correctly pointed out that neither Wright nor Burikov, alone or in combination, disclose or suggest brushes that electrically connect resistors of an inkjet print head to drive circuitry for the printing unit. Like Wright and Burikov, Shen also fails to disclose or even suggest brushes that electrically connect resistors of an inkjet print head to drive circuitry for the printing unit.

Moreover, even assuming, arguendo, that would be obvious to modify the hypothetical combination of Wright and Burikov additionally based upon the teachings of Shen, the resulting hypothetical combination would still fail to disclose

brushes that electrically connect resistors of an ink jet print head to drive circuitry for the printing unit. Rather, the hypothetical combination, would, at most, merely result in an inkjet printed having resistors to eject ink, wherein the selected firing of the resistors is still performed in response to signals communicated over a radio channel (not across a brush) with a control unit as taught by Burikov. (See Burikov, column 4, lines 19-20). Accordingly, the rejection of claims 55 and 56 should be reversed for this additional reason.

Conclusion

In view of the foregoing, the Appellants submit that (1) claims 43-51 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and are therefore patentable; (2) claim 52 is not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of Japanese Patent 04310770 (Inoue) and is therefore patentable; and (3) claims 55-57 are not properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,539 (Wright) in view of US Patent 6,341,839 (Burikov) and further in view of US Patent 6,623,105 (Shen) and are therefore patentable. Accordingly, Appellants respectfully request that the Board reverse all claim rejections and indicate that a Notice of Allowance respecting all pending claims should be issued.

Summary

For the foregoing, it is submitted that the Examiner's rejections are erroneous, and reversal of the rejections is respectfully requested.

Dated this 25th day of March, 2008.

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CLAIMS APPENDIX

Claim 43 (Previously Presented): A system for simultaneously printing on two or more media surfaces, comprising:

at least one printing unit disposed on a closed printhead path; and

a print medium feed unit adapted to feed at least one print medium through said closed printhead path, said at least one print medium including two or more print surfaces; and

means for electrically communicating with a print controller as said printing unit travels along said closed printhead path, said means for electrically communicating includes conductive brushes extending from said printing unit, said brushes being adapted to communicate with a conductive bus positioned around said closed printhead path;

wherein said printing unit is adapted to travel along said closed printhead path to print on at least two print surfaces.

Claim 44 (Previously Presented): The system according to claim 43, wherein said printing unit is adapted to print identical information on each of said at least two print surfaces.

Claim 45 (Previously Presented): The system according to claim 43, wherein said printing unit is adapted to print different information on each of said at least two print surfaces.

Claim 46 (Previously Presented): The system according to claim 43, wherein said print medium feed unit is adapted to feed a single print medium, and wherein said printing unit is adapted to print on two sides of said single print medium.

Claim 47 (Previously Presented): The system according to claim 43, wherein said printing unit is adapted to travel in a single direction along said closed printhead path.

Claim 48 (Previously Presented): The system according to claim 43, wherein said closed printhead path is oblong.

Claim 49 (Previously Presented): The system according to claim 43, further comprising a drive system adapted to carry said printing unit along said closed printhead path.

Claim 50 (Previously Presented): The system according to claim 49, wherein said drive system includes a drive belt and a pair of opposing pulleys, said printing unit being engaged to said drive belt.

Claim 51 (Previously Presented): The system according to claim 50, wherein said opposing pulleys include a drive pulley for driving the belt and an idler pulley for stabilizing the belt.

Claim 52 (Previously Presented) The system according to claim 50, wherein each of said pair of opposing pulleys are adapted to allow said printing unit to pass around one of said pulleys to travel along said closed printhead path.

Claim 53 (canceled)

Claim 54 (canceled)

Claim 55 (Previously Presented): The system according to claim 43, wherein the printing unit includes resistors configured to eject ink from associated nozzles and wherein the brushes are configured to electrically connect the resistors to drive circuitry for the printing unit.

Claim 56 (Previously Presented): The system of claim 55, wherein the brushes are configured to provide power to selected resistors for firing the selected resistors.

Claim 57 (Previously Presented): The system of claim 43, wherein the print medium feed unit is configured to feed the at least one print medium from at least one roll and wherein the at least one print medium as a width of between 1 cm to 21 cm.

Claim 58 (Previously Presented): The system of claim 57, wherein the system comprises a cash register.

Claim 59 (Withdrawn): A system for simultaneously printing on two or more media surfaces, comprising:

a drive system comprising:

a first pulley having a first notch;
a second pulley having a second notch; and
a belt about the first pulley and the second pulley;

at least one printing unit disposed on the belt which forms a closed print head path, wherein the at least one printing unit is connected to the belt at a belt attachment and wherein the first notch and the second notch are configured to receive the attachment when the attachment is traveling around the first pulley and the second pulley; and

a print medium feed unit adapted to feed at least one print medium through said closed printhead path, said at least one print medium including two or more print surfaces;

wherein said printing unit is adapted to travel along said closed print head path to print on at least two print surfaces.

Claim 60 (Withdrawn): The system of claim 59, wherein the print medium feed unit is configured to feed the at least one print medium from at least one roll and wherein the at least one print medium as a width of between 1 cm to 21 cm.

Claim 61 (Withdrawn): The system of claim 60, wherein the system comprises a cash register.

Claims 62 (Withdrawn): The system of claim 59 further comprising conductive brushes extending from each of the at least one printing unit, the brushes configured to provide communication from a drive circuit not carried by the belt to the at least one print unit carried by the belt.

EVIDENCE APPENDIX

There is no evidence previously submitted under 37 C.F.R. §§ 1.130, 1.131 or 1.132 or other evidence entered by the Examiner and relied upon by Appellant in this appeal. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(ix) are satisfied.

RELATED PROCEEDINGS APPENDIX

There are no decisions rendered by a Court of the Board in a proceeding identified in the Related Appeals and Interferences section. Accordingly, the requirements of 37 C.F.R. §§ 41.37(c)(1)(x) are satisfied.